

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number  
**WO 2004/012503 A2**

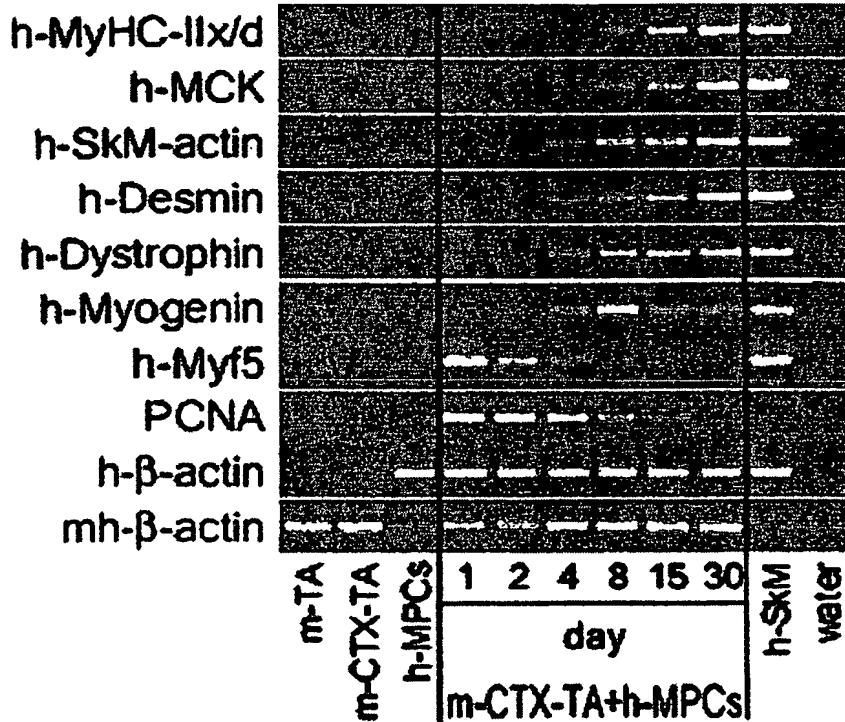
- (51) International Patent Classification<sup>7</sup>: **A01K 67/027**
- (21) International Application Number:  
PCT/EP2003/009008
- (22) International Filing Date: 30 July 2003 (30.07.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/399,745 30 July 2002 (30.07.2002) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: COMPOSITIONS COMPRISING MUSCLE PROGENITOR CELLS AND USES THEREOF



(57) Abstract: The present invention shows the *in vivo* myogenic differentiation of muscle progenitor cells (MPCs), being derived from joint tissue, in a mouse model of skeletal muscle regeneration. MPCs participated in the regeneration process by long-term persistence and contribution to the compartment of myonuclei and the pool of functional satellite cells. When injected into dystrophic muscles of immunosuppressed mdx mice, human MPCs restored dystrophin in some fibers, and rescued the expression of mouse mechano-growth factor. In addition, the human MPCs derived from synovial membrane were injected into infarcted myocardial muscle. The MPCs engrafted successfully, underwent proliferation and differentiation leading to functional recovery and maintenance of the cardiac muscle. MPCs represent an alternative source of myogenic cells in therapeutic approaches for postnatal skeletal and cardiac muscle repair.